Lumbosacral plexus palsy and pelvic myositis after gluteal muscle injection

Westphal, Laura P ; Guggenberger, Roman ; Ho, Michael ; Jung, Hans-Heinrich ; Petersen, Jens A

Abstract: A 55-year-old man presented with left leg weakness, incontinence, and fever. Three weeks prior, he had undergone gluteal infiltration for pain related to coxarthrosis. C-reactive protein (197 mg/L) and leukocytes (12.5 G/L) were elevated; CSF was normal. MRI (figure) demonstrated left lumbosacral plexus and pelvic muscle swelling with contrast enhancement and chronic femoral head necrosis. Needle EMG motor unit action potentials were normal in the vastus lateralis muscle but could not be recorded from the left-sided tibialis anterior and gastrocnemius muscles due to a lack of volitional activity. We suggest an infectious myositis with secondary plexus involvement after intramuscular injection of steroids and analgesics as causative pathology.1,2 Surgical muscle debridement, girdlestone arthroplasty, and antibiotic treatment with ceftriaxone, doxycycline, and clindamycin IV were conducted. Rehabilitation led to partial recovery of the motor deficits, but bladder dysfunction persisted.

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CASE

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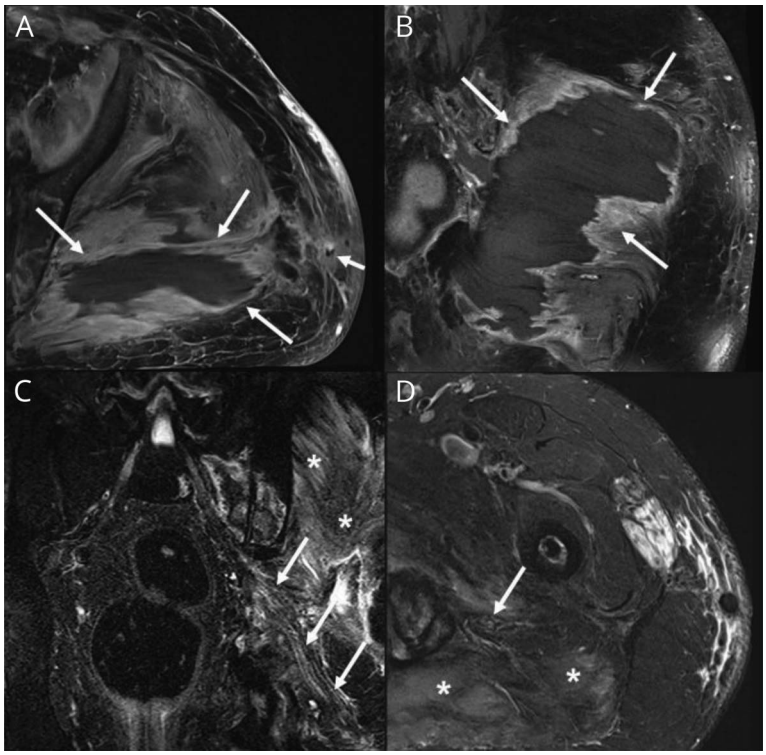
Figure MRI



T1-weighted MRI shows left-sided gluteal muscle necrosis and hyperperfusion (A, B, arrows); subcutaneous contrast enhancement with air entrapment indicates the possible injection trajectory (A, short arrow). On fat-saturated MRI, muscle edema (C, D, asterisks) and swelling of the sciatic nerve are demonstrated (C, D, arrows), indicative of necrotizing myositis and secondary nerve involvement.

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Author contributions

L.P. Westphal drafted the manuscript. J.A. Petersen helped to draft the manuscript and revised it. R. Guggenberger and M. Ho acquired the MRI and revised the manuscript. H. Jung revised the manuscript.

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Disclosure

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